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## Meeting Notes

Attendees: See Attached List

Date/Time: May 24, 2001

Project No.: 50885

Place: Matthew Thornton  
Elementary School  
  
Londonderry, NH

Re: I-93 Salem-Manchester ATF Meeting  
Windham/Derry Town Line through Exit  
4 to Stonehenge Road

Notes taken by: Bruce Tasker

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### Jeff Brillhart reviewed Project Status:

In January, the Department completed and distributed the Rationale Report, which essentially documents all work done over the previous eight months relative to looking at various alternatives. The recommendations in the Rationale Report suggest the following:

- Consider widening I-93 to be three lanes in each direction the entire length.
- Consider widening I-93 to be four lanes in each direction the entire length.
- Consider widening I-93 to be four lanes south of Exit 3 and three lanes north of Exit 3 in both directions.
- Construct Park and Ride lots at Exits 2, 3, and 5, and enhance the Exit 4 Park and Ride as appropriate.
- Expand existing bus service to Boston with stops at Exits 2, 3, and 5 as well as Exit 4.
- Enhance bus service by providing service between the NH Park and Ride lots and the Industrial areas in northern Massachusetts.
- Utilize Intelligent Transportation System Technology and improve upon the Department's incident management capabilities.
- Consider short term, localized improvements to address immediate safety concerns and capacity improvements where possible (Exit 2 NB on ramp; widen Pelham Road at Exit 2; create double-left off Exit 3 NB off-ramp; improve turning from NH 111 EB onto Exit 3 I-93 SB ramp; lengthen Exit 3 SB on-ramp; lengthen NH 102 EB left turn lanes going to I-93, Exit 4 NB on-ramp; lengthen I-93 SB off-ramp at Exit 5; improve Exit 5 signal timings.)

The Rationale Report also suggests that the Department not pursue the following:

- HOV lanes, as the ridership will not meet the threshold necessary to justify the lanes in the minds of those in the general-purpose lanes.
- Instituting rail service as part of this study. Ridership on any rail service would not diminish the need to widen the highway. However, the report notes that rail services will in all likelihood be required in the future if we are to maintain the level of mobility that is expected today. With that in mind, it is proposed that the highway widening be done in such a manner as to retain the room for the possibility of a rail line in the highway corridor sometime in the future.

In addition, the Department is trying to coordinate with the State of Massachusetts and with the NH Congressional Delegation in an effort to conduct a more global study of the transportation needs of the region served by I-93 extending from Boston to Manchester or even Concord. The study would look to concentrate on long-term needs and focus primarily on transit options. Having Massachusetts as a partner would allow for a more detailed discussion of the feasibility of the various rail alternatives.

Relative to other aspects of the project, the Department continues to hold monthly meetings with the environmental resource agencies. These Agencies appear to recognize the need to widen I-93 and correct deficiencies associated with the existing infrastructure. The agencies feel that serious studies need to be carried forward now relative to rail service and that perhaps these studies should be done as part of the current highway study and to the same degree of detail, as opposed to concurrently with the highway widening studies.

The Agencies also feel strongly the improvements to I-93 will result in substantial secondary impacts to natural resources. That is, by improving I-93, NH becomes more accessible which entices more development for homes and businesses, which in turn impacts natural resources. To address to what degree and where these secondary impacts might occur, the Department, at EPA's urging, is proposing to utilize an Expert Panel to evaluate the issue. In essence a workbook will be prepared outlining current trends, and existing conditions relative to zoning, utilities, roadway infrastructure, etc. A panel of experts in the fields of land use, development and economic issues will review the workbook and answer questions relative to what the future might hold if the highway is widened or not. The panel will provide their evaluation individually and independently. Subsequently, the evaluations will be catalogued and returned back to the panelists so they can evaluate and consider each other's responses in terms of their own and then change or clarify their positions. Through this iterative process, hopefully some consensus or a range of possible scenarios can be provided to the Agencies and to the people of New Hampshire on the implications of widening I-93. The process is scheduled to begin in June.

Jeff noted that the Department continues to meet with Massachusetts's officials to learn about their project to consider what might be done to improve the stretch of I-93 through Methuen and Andover where shoulders are allowed to carry traffic during peak travel periods. These officials are interested in a joint NH/MA study of the I-93 corridor and long term transit needs.

The Department, State Police, FHWA and local safety (police and fire) organizations are meeting regularly to consider what steps might be taken to improve incident management capabilities; that is addressing accidents along I-93 in a more timely manner to minimize delays to motorists. This initiative is still in the early stages, but the communication has been very helpful and it

appears that the efforts will result in very positive improvements for the motorists in terms of reducing delays along the highway due to accidents or incidents.

Jeff noted that relative to the plans being presented, the plans are still very much preliminary plans. The plans will be modified based on input the Department receives at the various meetings. There still needs to be quite a bit of design done before they are complete enough to fully address impacts. The plans are subject to change.

Tony Grande then presented the plans developed to date for widening I-93 and reconstructing the Exit 4 interchange in the Derry/ Londonderry area. Tony explained that the plans represent a more detailed design of the conceptual designs presented in the Rationale Report. He explained the typical cross section that shows a three-lane/ four-lane widening of I-93 with approximately 60 to 90 feet inside the median area being reserved for a potential future rail line. There is also additional width along each of the inside (median) shoulders (6-ft) to accommodate possible future HOV lane construction and provide some flexibility in the design as the project moves forward.

This section of I-93 begins at the Windham/Derry Town line and extends northerly approximately 5 miles through the Exit 4 interchange and ending at Stonehenge Road. Preliminary plans are shown at a scale of 1"=200' and depict a 4-lane design scenario, which includes four 12-ft lanes with 12-ft shoulders in each direction, and a 3-lane design scenario, which includes three 12-ft lanes with 12-ft shoulders in each direction.

The two concepts presented are generally similar except at the Exit 4-interchange area, where the widening of I-93 is either all to the east, (the westerly edge of the SB barrel is held) or all to the west (the easterly edge of the NB barrel is held).

#### **North Lowell Road to Kendall Pond Road**

Beginning at the southerly end of this section of I-93 near the Windham/Derry Town line, the design in this area is controlled by the recently replaced and widened North Lowell Road bridges where the inside median edges of both the NB and SB barrels are held and the widening occurs to the outside. Proceeding to the north approximately ½ mile, a prime wetland east of and adjacent to the NB barrel is avoided by shifting the widening all to the west and holding the outside edge of the NB barrel. The SB barrel is also shifted to the west to accommodate the NB widening and to provide for an area in the median for possible future rail. Just north of the wetland control area, all of the widening remains to the west. The outside edge of the NB bridge and the inside edge of the SB bridge are held as controls where I-93 passes over the Fordway Extension. Through this section the existing width between the bridges at North Lowell Road and Fordway Extension will only accommodate the minimum future rail typical width of 61 feet. With this option the rail will follow the SB barrel profile. At Kendall Pond Road and in the area of the Londonderry sewer treatment facility the widening occurs to the west. The outside edge of the NB bridge and the inside edge of the SB bridge are held as controls. North of Kendall Pond Road the median transitions from 61 feet to 87 feet to accommodate a future rail station in the Exit 4 interchange area. The 87-foot width is held northerly through a possible future rail station area just north of Stonehenge Road and through the Exit 5-interchange area. The 87-foot width allows for rail platforms in the median, open drainage, landscaping and opportunities to minimize median retaining walls where the NB and SB barrels are at different elevations.

#### **SB option North Lowell Road to Kendall Pond Road**

Between North Lowell Road and Fordway Extension another option was developed that would shift the SB barrel (maximum 60 feet) further to the west to provide for a wider median and less difficult and less costly construction. For this section of I-93, the NB and SB barrels are at substantially different elevation (approx. 20-25' maximum). With the minimum 61-foot median area proposed in the first layout, the widening is not only difficult due to the high rock excavation adjacent to the travel lanes (difficult traffic control/ temporary widening) but also costly due to a high (approx. 28 feet max.) and lengthy (approx. 2000 feet) retaining wall in the median to allow for the accommodation of the future rail line. The optional shift would allow this section of the SB barrel to be constructed away from the existing SB barrel providing for less disruption to traffic for the proposed I-93 widening as well as the traffic in the future should the rail line be constructed in the median. The shift would also allow easier and less costly future rail construction and a shorter (10 feet max) and less lengthy (800 feet) retaining wall, but would result in a larger rock cut along the west side of I-93.

#### **Kendall Pond Road to Ash Street/Pillsbury Road**

##### **Easterly widening alternative at Exit 4:**

This alternative would retain the existing SB ramps by holding the westerly edge of the existing I-93 SB barrel with all widening of the SB barrel and construction of the NB barrel occurring to the east. By retaining the existing SB ramp infrastructure, the cost of ledge removal and traffic control is reduced. Also, the existing park and ride facility would not be impacted. The configuration of the NB ramps would be retained, but the ramps would be shifted to the east to accommodate the widening. This option shifts the I-93 NB barrel closer to Wheeler Pond and the adjacent wetland area. No construction is expected to be required in the pond, although some impacts to the wetlands would occur, but could be minimized by the construction of retaining walls or steepening the highway slopes. This alternative would shift the widening into portions of the wetland area in the vicinity of Beaver Brook and the sewerage treatment plant. Again the impacts could possibly be minimized by the construction of retaining walls or steepening the highway slopes.

##### **Westerly widening alternative at Exit 4:**

This alternative would hold the easterly edge of the existing I-93 NB barrel by continuing the westerly widening proposed at Kendall Pond Road. All widening of the NB barrel and construction of the SB barrel would occur to the west. The basis of this concept is to shift the widening away from Wheeler Pond and associated wetlands and the Beaver Brook wetland area. No construction would be required in the pond. Some impacts to the wetlands could occur, but may be minimized by the construction of retaining walls or steepening the highway slopes. The westerly shift will require the realignment and reconstruction of the NH 102 EB to I-93 SB on and off-ramps. The layout would provide for the minimum 230' radius (as currently exists today) for the NH 102 EB to I-93 SB on-ramp. Substantial rock removal will be required during the reconstruction of the SB ramps. The realignment would impact the existing park and ride facility and require reconstruction and development of replacement parking. (Current facility is at capacity). Reconstruction and realignment of the SB ramps will create substantial traffic control issues while trying to maintain traffic during the removal of the high rock adjacent to traffic. Temporary ramps and lane closures will be necessary.

#### **NH 102**

Two options for NH102 are under consideration. Both of these options can be used with either of the easterly or westerly I-93 widening options noted. The first option is an "off-line" option, which would realign NH 102 south of the existing bridge over I-93. This would allow the use of the existing bridge to maintain traffic while the new bridge is completed. The new bridge will provide for 2-EB thru lanes, 2-EB left turn lanes, 2-WB thru lanes, a single right-turn lane and 5-foot shoulders and sidewalks. The westerly approach work can be completed in the vicinity of the existing NH 102 EB to I-93 SB on-ramp. The proposed NH 102 realignment will tie back to the existing alignment just west of the Burger King drive. The proposed 7-lane section on the NH 102 bridge will transition to a 5-lane section in the vicinity of the Burger King drive and then transition to a 3-lane section (similar to the existing lane use) near Londonderry Drive.

The second option is an "on-line" option that would replace the existing bridge at the existing location. A temporary detour bridge would be necessary and it would be constructed to the south of the existing bridge with temporary connections to the existing ramps in order to maintain traffic flow. The design is similar to the first NH 102 option in that the number of lanes and lane use along NH 102 would be the same and the limits of reconstruction would be the same.

#### **Exit 4 to Stonehenge Road**

Two options are being considered for the section of I-93 between Exit 4 and Stonehenge Road and include an extension or continuation of the I-93 easterly and westerly widening alternatives described previously.

##### **Easterly widening alternative extension:**

The easterly shift alternative continues to hold the westerly edge of the SB barrel north from the Exit 4-interchange area. The widening occurs east into the existing median area. An 87-foot rail typical would be preserved in the median (to accommodate a possible rail station) and the NB barrel would be realigned and widened to the east. This shift impacts a house on the westerly end of Reo Lane and the pavement and loading area for two commercial buildings (Londonderry Commercial Center and Stom Commercial Park) along the westerly side of Londonderry Drive. This option would also impact a portion of the wetlands located between the I-93 NB barrel and Seasons Lane, just north of Ash Street. In the vicinity of Stonehenge Road, the widening of the highway and the bridges over Stonehenge Road occurs to the outside for both the NB and the SB barrels.

##### **Westerly widening alternative extension:**

The westerly shift alternative continues to hold the easterly edge of the NB barrel north from the Exit 4-interchange area. The widening occurs west into the existing median area. An 87-foot rail typical would be preserved in the median (to accommodate a possible rail station) and the SB barrel would be realigned and widened to the west. This option would impact a portion of the wetlands in the Pillsbury Brook area located just north of the Pillsbury Road overpass adjacent to Trolley Car Lane on the west side of the SB barrel. In the vicinity of Stonehenge Road, the widening of the highway and the bridges over Stonehenge Road occurs to the outside for both the NB and the SB barrels.

#### **Ash Street/Pillsbury Road Bridge over I-93**

The Ash Street/Pillsbury Road Bridge over I-93 would be replaced to accommodate the I-93 widening and the area in the median being preserved for future rail. Two options are under consideration. The first option is an "off-line" alternative that would realign and reconstruct approximately 2500 feet of Ash Street/Pillsbury Road to the south. The existing bridge would be used to maintain traffic during construction and removed after the traffic is shifted to the new structure. The new bridge would have two 12-foot lanes, 5-foot shoulders and a 5-foot sidewalk. The Ash Street/Pillsbury Road southerly realignment would minimize impacts to wetlands in the area and to a potentially historic parcel in the NW quadrant. East of I-93 on the south side of Ash Street, two businesses would be impacted. The second option is an "on-line" option. The existing bridge would be replaced in its existing location. The new structure would also have two 12-foot lanes, 5-foot shoulders and a 5-foot sidewalk. A temporary detour bridge would be constructed to the south of the existing bridge to maintain traffic.

Charlie Hood then explained the noise abatement process for highway projects, and discussed the locations in Derry and Londonderry that were being studied. Charlie explained that the various alternatives are modeled to predict the noise levels. The model takes into account topography, traffic volumes, distance of receptors, vegetation, etc., and the model is tested against existing conditions and noise levels measured in the field. Once the impacted receptors (66 decibels or higher) have been identified, abatement measures are considered. If a noise barrier can be built, given the existing geometry and topography, and not impact other important resources such as wetlands, historic sites, etc., then, an economic analysis is done to consider the cost of the sound barrier with respect to the number of homes that would receive at least a 5-decibel reduction in noise. If the barriers cost \$30,000 or less per receptor, the Department would recommend barriers be installed in keeping with state and federal guidelines. This study is part way through the evaluation process and a number of areas with high noise levels have been identified.

#### **Questions and answers related to noise abatement and sound walls.**

Comment: Please explain the \$30,000 cost per receptor requirement.

Charlie Hood: The economic criteria are based upon \$30,000 per receptor. The total cost to build the sound barrier is estimated, and then divided by the number of houses that would achieve a minimum reduction of 5 decibels. If that value is \$30,000 or less, then the economic criteria would be met, and the Department would consider constructing a sound barrier. If the economic criterion were not met, a sound wall would not be constructed. In Nashua, where the economic criteria was not met at some locations, but trees and vegetation were removed that were previously acting as screening, the Department has constructed privacy fencing along the right of way of the highway.

Comment: When are the sound measurements taken? Is the Department using the same criteria that was used for the noise barriers that are being constructed along I-93 near Bodwell Road?

Charlie Hood: The measurements are taken at different times during the day. We look to account for the worst case. For example, in the morning we test the SB barrel of I-93, which is when the traffic is the heaviest and still moving fast. If the highway is congested and the speeds are low, then the noise is most likely not as great. A general rule of thumb is, if you double the amount of traffic on a section of the highway, the noise is increased by 2-3 decibels. There are some variations in the traffic, however, the

traffic volumes are not doubling when comparing the morning peak hour with the afternoon peak hour, so the noise differences are not significant. The noise study identifies impacted receptors using the worst case noise hour (which is a 60-minute period throughout a 24-hour day) that would result in the highest noise level at a particular location. This hour is usually, but not always, associated with the peak traffic hour. The Department is using the same criteria to establish noise abatement for the I-93 widening as for the Bodwell Road project.

**Comment:** When the Department constructed I-93 in the 1960's through the Stonehenge Road area, I noticed how loud the noise was, so I requested the NHDOT put in a noise barrier. The Department replied that a barrier for one house is not cost effective. I assume that because there is still only one house along Stonehenge Road that you still will not consider some type of barrier?

**Charlie Hood:** We would identify properties to find out what the noise levels are. If an impact exists, the Department would evaluate the practicability of providing a barrier given effectiveness of the barrier, the feasibility of construction, and the cost/benefit of the barrier. The current cost we use for estimating purposes is \$20/sf of wall. The standard noise barriers the Department has been constructing generally involve using concrete posts with pressure treated wood slats between. If the opportunity exists, earthen sound berms are also used separately or in combination with the sound barriers to help reduce the cost. The maximum wall height is 25 feet. A single house generally would not qualify for a noise barrier.

Charlie noted that the following locations are not finalized yet, and still need to be reviewed further within the NHDOT and with FHWA before a decision is made as to whether a barrier is constructed nor not. Preliminary analysis indicates the following:

**Going from south to north:**

**Spinnaker Drive Area**

- Existing noise levels are in the mid 60 to low 70 decibel range.
- A couple of homes exceed the Noise Abatement Criteria and several others are close.
- At this time, the Department is still completing investigations to determine if enough homes are impacted to qualify for a barrier and if that barrier would meet the economic criteria.

**Tracy Drive Area**

- Existing Noise Levels are in the low 60's to high 60's decibel range.
- Several homes in this area exceed the Noise Abatement Criteria.
- At this time, the Department has not concluded that the economic criteria will be met.
- Further study is necessary to determine if a noise barrier will be constructed at this location.
- Prime wetlands further complicate matters at this location.

**Fordway Extension (STA 1530)**

- Some homes on Fordway Extension closest to the highway do exceed the Noise Abatement Criteria.
- It appears that there would not be enough homes to meet the Department's economic criteria.

- In addition, even if a barrier were constructed, the homes would still have a noise contribution from Fordway Extension, which would reduce the effectiveness of the barrier.
- At this time, the Department is not proposing to construct a barrier at this location.

#### **Matthew Drive/Derryfield Road/Friar Tuck Lane**

- Noise levels in this area do not appear to exceed the Noise Abatement Criteria. However several homes are close enough to the criteria that further investigation in this area is needed before a final decision is made.

#### **Tokanel Drive**

- There are some residential areas along this roadway that exceed the Noise Abatement Criteria but not enough to meet the Department's economic criteria.
- At this time, the Department does not propose to construct a barrier at this location.

#### **Red Lane**

- Some homes in this area exceed the Noise Abatement Criteria but not enough homes to meet the economic criteria.
- At this time, the Department does not propose to construct a noise barrier at this location.

#### **Ash Street**

- Some homes in this area exceed the Noise Abatement Criteria but not enough homes to meet the economic criteria.
- At this time, the Department does not propose to construct a noise barrier at this location.

#### **Trolley Car Lane**

- The majority of the homes in this area are adjacent to the highway and exceed the Noise Abatement Criteria.
- It appears that the economic criteria would be met.
- Although there are wetlands in this area that will complicate the construction of a barrier, it appears that a noise barrier at this location will be proposed.

#### **Seasons Lane**

- The majority of the homes in this area exceed the Noise Abatement Criteria.
- It appears that the economic criteria would be met.
- Although there are wetland in this area that will complicate the construction of a barrier, it appears that a noise barrier will be proposed.

Comment: Please explain the "shadow" effect, and how it may effect the Tracy Drive area.

Charlie Hood: In some locations, because of the terrain and location where the wall is constructed, the sound actually goes up and over the barrier. This is known as the "shadow" effect. Further evaluations are necessary in the Tracy Drive area. The barrier may not



provide the necessary decibel reduction to the number of homes that would allow the economic criteria to be met.

Comment: Regarding Trolley Car Lane, there are three houses at the northerly end of the road near the highway. Does the evaluation include these homes?

Charlie Hood: These homes will be considered. One thing to keep in mind is that if a barrier is constructed, the length of the barrier needs to extend beyond the last qualified receptor by a distance equal to four times the distance between the receptor and the noise barrier for the barrier to be effective (General rule of thumb). Some homes may actually fall behind a barrier even though they don't meet the noise abatement criteria.

Comment: I live on the corner of Woodhenge Road and NH 28, but my house and all the houses in my neighborhood were built in the 1970's, not back in the 60's when the highway was originally constructed, will the Department be looking at this area?

Charlie Hood: We have not looked at that area yet. We will look at that area as part of the next section of I-93. One thing we do consider is the noise from I-93 as well as from other busy adjacent roads such as NH 28 or NH 102. These roads can contribute to the overall noise levels.

Comment: I live on Stonehenge Road. If a home that is 50 feet from the I-93 gets a barrier and I live 50 feet beyond that home you are telling me that I might not get a barrier?

Tony Grande: We have not looked at the Stonehenge Road area yet. That will be part of the presentation at the next meeting in June.

Comment: What you are telling me is that because there is just one single family home, it is not important or worthy of a barrier.

Jeff Brillhart: One house by itself generally will not meet the economic criteria. However, the Department will be discussing the Stonehenge Road area and the area to the north at the next meeting in June. There are neighborhoods along NH 28 to the north that are being evaluated.

Comment: What are you considering relative to noise about the proposed rail line?

Jeff Brillhart: The Department is not considering the rail line as part of this project. That evaluation would be part of a future rail project.

Comment: Would the train create noise problems that would be different than those from the highway?

Charlie Hood: The one difference that I am familiar with relative to trains involves noise from rail-coupling in areas that are adjacent to neighborhoods. This creates a different noise consideration. We would review the rail guidelines for noise if a rail line were under consideration. I have not been personally involved with rail noise evaluations. But at this time, we are just leaving room for a light rail system in the median area. We are not studying rail as part of this project.

Comment: How does Exit 4A effect this project?

- Jeff Brillhart: The Department is coordinating with the Town relative to the Exit 4A study. When the alternatives are sorted out as to what exactly Exit 4A might be, further coordination of designs will be required. The Exit 4A study is preparing an EIS, just as we are, and they will need to study noise also. They will have to come up with an analysis as to how the Exit 4A interchange might affect the neighborhoods around that interchange. They will have to do the same sort of study and the same criteria will apply.
- Comment: Can you point out where Exit 4A is proposed to go?
- Jeff Brillhart: There are three or four different alternatives (Tony pointed to the plan). The final location for Exit 4A has not yet been determined.
- Comment: Is the noise analysis based on the three or the four-lane alternative?
- Charlie Hood: Currently we are basing it on a four lane alternative as a worst case condition relative to impacts, but if it is decided that three lanes are preferred, then the analysis would be reviewed.
- Comment: In looking at this plan, you were able to keep the rail line in the median. In the Exit 1 area, the rail was to the outside.
- Tony Grande: In the Exit 1 area, there wasn't room within the median to accommodate the rail.
- Peter Griffin: At other meetings, it was stated that this would be the last time this highway would be widened. Is that correct?
- Jeff Brillhart: Yes, that is the opinion of the Department.
- Peter Griffin: The options for the rail, the one down the median of I-93 and the other one which is near the NH 28 corridor, should be considered very soon because it takes time to complete these studies and then begin construction. We need to have a plan because I-93 won't be completed until 2010 and we don't want to be again in a crisis mode.
- Jeff Brillhart: The Department agrees that we need to get on with the study of rail. NH and Massachusetts need to partner to develop a meaningful study that meets the needs of both states.
- Comment: Would the Department construct only 3-lanes if that were the outcome of this study, (i.e. the Department would never construct 4-lanes in each direction)?
- Jeff Brillhart: The Department thinks that 4-lanes is the greatest number of lanes that would be constructed along this section of I-93 and feels that the citizens of NH would not tolerate any more widening than 4-lanes. The Department also feels that Massachusetts would not tolerate any more widening than four lanes. In NH, the decision may be to widen the highway to 3-lanes, but as part of the construction the highway may need to be over-widened, at least temporarily, to four lanes to maintain traffic during construction. If the highway is widened to 4-lanes, at least on a temporary basis, perhaps the additional width is left in place or perhaps the temporary pavement is removed. If a 4-lane highway is the final recommendation then the traffic control and construction phasing is easier because the two additional lanes can be constructed first, then the traffic shifted onto the new lanes, and then the

existing two lanes are reconstructed. The end result is a 4-lane highway in each direction.

Comment: Is the I-93 construction and traffic control similar to the NH 101 construction?

Jeff Brillhart: The I-93 widening would be similar to some portions of the NH 101 construction. It is simpler if you widen the highway to 4-lanes. If the highway is only widened to 3-lanes the construction and the traffic control gets a bit more complicated.

Comment: Does the rail plan have to be finalized prior to the initial construction starting in 2004?

Jeff Brillhart: I don't know. It would be nice to know where the rail is going to go. The Department feels that a space should be preserved in the median of I-93 so as not to preclude that opportunity in the future. The Department feels that this project to widen I-93 is the final widening. Other transportation modes will need to be considered and rail would seemingly be the mode of the future, but exactly what technology would be available for that rail, I am not sure. As the need for rail becomes more critical nationwide, rail technology will be advanced and hopefully it will be more cost effective and easier to design for in the future.

Comment: So, the answer is there would have to be some finalization on rail prior to the initial construction?

Jeff Brillhart: No, the Department does not think that it is critical that rail be sorted out before the I-93 widening starts. It would be desirable to initiate the study as soon as possible because it takes a long time to study, permit and construct rail infrastructure just as it does for highway infrastructure. If NH does not get started now, it is going to be that much longer into the future before rail is actually built. One thing to remember is that at Exit 1, even if the highway is widened to 4-lanes in each direction, by the year 2020 the highway will be at capacity again. By then, NH needs to have another plan in place or NH is going to be sitting in traffic again. So the rail would be a solution.

Peter Griffin: What is important at this point in time, is that the towns understand that these improvements for I-93 are only a stopgap. The towns really have to begin thinking about other modes of transportation, which include rail, buses, etc. We need to look at an integrated transportation system for the corridor. The communities as a whole have to begin thinking what they want for a transportation system in their community. If there are any questions whether or not rail and highway can co-exist you just have to look to the south where there are two rail lines approximately 40 to 50 miles south of Boston carrying 10,000 people a day.

Comment: I get uncomfortable when we start talking about doing 3-lanes now and then coming back later for a fourth lane. It is going to be significantly less costly to build the 4-lanes now than to build 3-lanes now and build a fourth lane later. I don't see a scenario where we don't need 4-lanes, all the way to Manchester. I think it is important that 4-lanes are constructed the first time. Other forms of transportation should be considered, but most people are still going to use vehicular transportation whether it's buses, or individual vehicles.

Jeff Brillhart: We are looking for input on this issue. It's not a cut and dry decision.

Comment: The potential additional cost of doing 3-lanes now and coming back again to do the fourth lane needs to be factored into the analysis. My feeling is that it is going to be less expensive in the long term to do 4-lanes now and do all the things you need to do, the construction equipment will be there and the rights of way needed will be acquired. Constructing only 3-lanes and then turning around five or ten years later and widening the highway again does not make sense. With 4-lanes traffic will only be disrupted once, not twice.

Comment: Two years ago I don't think the Department was considering a rail line. Am I correct?

Jeff Brillhart: After the statewide traffic models were completed (approx. 2 years ago) this widening study began in earnest. The NHDOT Commissioner felt at that time, that when all is said and done, I-93 will not be widened again. The Commissioner directed the Department to make provisions for the future as part of the widening to include room for the possibility of a train in the future. The Department is carrying forward that idea.

Comment: Two years ago the Department knew it was going to widen I-93, and yet at Stonehenge Road you re-did both bridges with just two lanes. Why didn't you construct 4-lane bridges?

Jeff Brillhart: That's a good question. Back in 1988 the Department initiated the I-93 widening project. The Department started with meetings in the Town of Salem. The idea was to widen that section of I-93 and then proceed to the north over a period of years and by the year 2001 or so this project would be all done. That didn't happen because the environmental agencies felt strongly that the highway needed to be looked at in its entirety and not in a piecemeal fashion. As a result the Department had to look at the entire section of the I-93 corridor, prepare an EIS, and develop a statewide traffic model. All of the bridges that were intended to be replaced or rehabilitated as the highway was widened didn't get fixed in a timely manner as originally intended. When the Department contacted the Resource Agencies to discuss the very poor condition of the bridges and asked for approval to over-widen the bridges so that they would not have to be redone again in the future, the agencies felt that if the bridges were over-widened the additional width would possibly dictate how the highway should be widened in the future. The agencies felt that without studying the whole corridor you can't make a decision as to which side a bridge should be over widened. The Department and the agencies did not agree at first, so the early bridge improvements were fixed or replaced with 2-lanes only. As the Department addressed additional bridges that were in poor condition, additional discussions were held with the agencies. Over time they agreed that the bridges could be over-widened to maintain traffic during construction. As a result, some of the improved bridges were over-widened for traffic control purposes and they were over-widened in a way that can accommodate the widening of I-93 to the north and south of the bridge. As Tony Grande mentioned, there are locations where the bridges are assumed to be a control and we try to use the over-widening that was completed. If the study suggests that the bridge needs to be widened in the opposite direction, then the over widening will have been for naught. It would have been nice to fix those bridges and fix them so they fit right into the I-93 widening. At Bodwell Road the Department has developed the design so that the ultimate widening of I-93 whether it be 3 or 4 lanes can be accommodated, although additional bridge work will be required.

Jeff Brillhart went over the project schedule noting that the next Resource Agency Meeting will be on June 20, 2001 at 4:00 pm at the West Running Brook school in Derry and will cover the segment of I-93 from Stonehenge Road through Exit 5 to the I-293/I-93 interchange. The same section of I-93 will also be presented at the next ATF Meeting on June 28 at 6:00pm also at the West Running Brook school in Derry.